



Dow Packaging & Specialty Plastics

Product Data Sheet

ELVAX™ 450

Ethylene Vinyl Acetate Copolymer

General Information

Product Description ELVAX™ 450 is an ethylene-vinyl acetate copolymer resin for use in industrial applications.

Status

Material Status Commercial: Active

Typical Characteristics

Composition 18% By Weight Vinyl Acetate comonomer content
Thermal Stabilizer: BHT antioxidant

Applications ELVAX™ resins can be used in a variety of applications involving molding, compounding, extrusion, adhesives, sealants, and wax blends.

Typical Properties

Physical	Nominal Values	Test Method(s)	
*Density ()	0.941 g/cm ³	ASTM D792	ISO 1183
*Melt Flow Index (190°C/2.16kg)	8 g/10 min	ASTM D1238	ISO 1133
Thermal	Nominal Values	Test Method(s)	
*Melting Point (DSC)	86 °C (186.8 °F)	ASTM D3418	ISO 3146
Vicat Softening Point ()	61 °C (141.8 °F)	ASTM D1525	ISO 306

Processing Information

*Maximum Processing Temperature 235 °C (455 °F)

General Processing Information ELVAX™ resins can be processed by conventional thermoplastic processing techniques, including injection molding, structural foam molding, sheet and shape extrusion, blow molding and wire coating. They can also be processed using conventional rubber processing techniques such as Banbury, two-roll milling and compression molding.

ELVAX™ can be used in conventional extrusion equipment designed to process polyethylene resins. However, corrosion-protected barrels, screws, adapters, and dies are recommended, since, at sustained melt temperatures above 455°F (235°C), ethylene vinyl acetate (EVA) resins may thermally degrade and release corrosive by-products.

FDA Status Information

ELVAX™ 450 resin complies with Food and Drug Administration Regulation 21 CFR 177.1350(a)(1) - - Ethylene-vinyl acetate copolymers, subject to the limitations and requirements therein. This Regulation describes polymers that may be used in contact with food, subject to the finished food-contact article meeting the extractive limitations under the intended conditions of use, as shown in paragraph (b)(1) of the Regulation.

